

## Experience

### Deutsche Bank | Senior Analyst

Aug 2020 – Jul 2024

- **Developed and delivered** strategic business solutions for the New Product Approval (NPA) tool system, collaborating with cross-functional business stakeholder teams to enhance features with actively involved in **Agile PI estimations** and **Agile PI planning** of business features and requirements.
- **Led machine learning-based analysis** of over **600K** loss-making events, applying **clustering algorithms** (DBSCAN, K-Means) and **Natural Language Processing (NLP)** to identify root causes and correlation among events data, helping the business **reducing investigation time by 30%**. Published a **summary report on Confluence**.
- **Developed and deployed a predictive dashboard**, improving **data retrieval efficiency by 40%** for business users and get a holistic view of Permitted Products within the organization, through **query execution plan optimization** and advanced SQL techniques like **SQL analytical functions**, **hierarchical queries** and **advanced join techniques**.
- **Spearheaded the development of a new data model** for a third-party data producer (OPUS & CCO), performed data engineering and ran multiple **SQL & Python scripts** to maintain **data consistency across 100K records** with the updated data model. **Recognized** in RFT Success Story for this delivery. [**Biggest Team Delivery - 2021**].
- **Led end-to-end design and development of Criteria-Driven Approvals and Condition-Driven Products** by implementing complex **JPA Criteria API queries** and creating new dashboards for a highly interactive and responsive UI using **ReactJS** improving response times by **50%**. **Recognized** and appreciated in email chain by Product Owner and NPA Team for this delivery. [**Biggest Team Delivery - 2023**].
- Successfully deployed and maintained **Elasticsearch** and **Logstash** to enhance search functionality, achieving a **20%** reduction in data retrieval times in a high-volume production environment for Permitted Products Library (PPL).
- Designed a feature for monitoring the execution of **Spark jobs** by generating and analyzing **SLA and Execution metrics** using real-time data from the Spark History Server, improving system efficiency by **35%** using performance metrics analysis.
- **Developed a React Native Android app** as part of a hackathon, incorporating **Text and Voice Sentiment Analysis** and an **AI Chatbot**. The app provided mental health support for **1,000+** users and was ranked among the top **5%** of entries.
- Owning Practice Deployment activities for major releases, while also ensuring stability and support for pre-prod environments.

### IBM | Software Engineer Intern

Jul 2019 – Dec 2019

- Successfully integrated Apple's social login identity feature, "**Sign in with Apple REST API 1.0**", into the **IBM Cloud Identity Connect** software.
- Gained in-depth knowledge of industry-standard **authentication protocols**, including **OAuth 2.0**, **OpenID Connect**, and **SAML**.
- Developed comprehensive **unit tests for the Health Check API**, ensuring reliable performance across various microservices within the IBM Cloud Identity Connect platform and generated detailed **code coverage reports** to identify untested code paths and improve overall test coverage.

## Skills

- **Programming Languages:** Python, C++, Java, R, SQL, Javascript, Typescript, C
- **Frameworks/Libraries/Tools:** Apache Spark, Hadoop, Spring, Spring Boot, React JS, OracleSQL, MySQL, TensorFlow, Keras, scikit-learn, NumPy, Pandas, Matplotlib, OpenCV, Microsoft Excel, Google Cloud Platform, Docker, Git, Neovim, LaTeX
- **Relevant Coursework:** Machine Learning, Data Mining, Neural Networks and Fuzzy Logic, Data Structures and Algorithms, Design and Analysis of Algorithms, Number Theory, Database Management Systems, Operating Systems, Object Oriented Programming, Software Engineering

## Education

### Rutgers University - New Brunswick

Jul 2024 – Present

Master of Science in **Statistics**

### B.I.T.S Pilani University

Aug 2016 – May 2020

Bachelor of Engineering in **Computer Science**

### Certifications

- **Coursera** - Deep Learning Specialization, Algorithms on Strings (UC San Diego), Algorithms on Graphs (UC San Diego), Software Architecture (University of Alberta), Service Oriented Architecture (University of Alberta)
- **Google Cloud Skills Boost** - Deploy to Kubernetes in Google Cloud, Automating infrastructure on Google Cloud with Terraform, Google Cloud Essentials

## Academic Projects

Object Localization using CNN | Python, Keras, Pandas, Matplotlib, Numpy, Pillow

Sep 2018

Creating a Linked-Data enabled smart client | Python, Flask, FastAPI, Docker, Redis,

Feb 2019

Reinforcement Learning Model for solving CartPole-v1 problem | Python, Tensorflow, Numpy, Matplotlib, OpenAI Gym

Mar 2019

## Awards/Achievements

- DB Recognition Award – For exemplary performance and great contribution in a quarter.
- Certified SAFe5 Agile Practitioner
- Ranked 58 in level 3 among 6000 teams in Flipkart GRiD – Te[a]ch The Machines — 2019
- Scored 370/450 in BITSAT (Top 0.22%)